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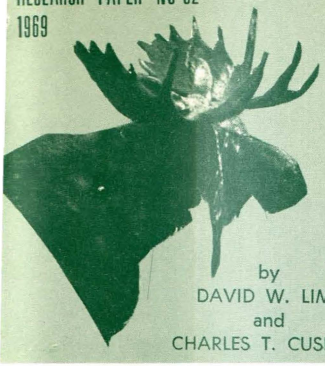

wildlife esthetics & auto campers

IN THE SUPERIOR NATIONAL FOREST

by
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WILDLIFE ESTHETICS AND AUTO CAMPERS IN THE SUPERIOR NATIONAL FOREST [1]

David W. Lime and Charles T. Cushwa

Many people involved in recreation research agree that the presence of wildlife adds substantially to the esthetic attraction of a forest setting. Yet, little is actually known about the importance of wildlife from the forest visitor's standpoint. It is simply assumed that he wants to see wildlife — but what kinds he would like to see, what kinds he does see, and how much his contact with wildlife adds to the enjoyment of his trip is unknown. These questions are not easily answered, because esthetic values are difficult to describe and even more difficult to evaluate in meaningful terms. Many resource managers and researchers have recognized this problem (Drury 1947, Sears 1951, Christy 1967); but, for the most part, research efforts have failed to meet the issue face to face.

Most of the previous research that has attempted to place a "value" on wildlife has done so by determining its dollar value — largely from hunting and fishing. For example, between 1952 and 1960, 44 such studies were reviewed in *Wildlife Abstracts*. These, plus more recent studies, have provided new insights into the importance of wildlife in the American economy and have answered many questions that confront resource administrators. Nevertheless, while economic studies have been numerous, a search of the literature produced not one research effort in which the nonconsumptive or esthetic value of wildlife was pursued in depth. Yet, in many papers it was tacitly assumed that contact with wildlife is rewarding for nearly *all* people, and that it is a primary reason for many outdoor excursions.

While many researchers and resource managers place wildlife high on the "plus" list of features of the natural environment, there are few facts available to support or contradict this judgment. Seeing birds and mammals is certainly rewarding to many Americans; for example, there are over 8 million bona fide birdwatchers in our country. Nonetheless, research to date has not provided a scientific evaluation of the esthetic importance of wildlife. In short, we think wildlife is important, but we don't know how important or to whom.

To gain some insight into the esthetic importance of wildlife to the forest visitor, we conducted a canvass of auto campers in the Superior National Forest in northeast Minnesota. Our study did not attempt to measure the importance of wildlife in any economic sense, but sought to find out why people came to the National Forest, where they came from, how many observed wildlife, what kinds of wildlife they observed, and whether seeing wildlife added to or detracted from their experience, and why.

[1] *The findings presented in this report also were presented by the senior author at the Northeast Fish and Wildlife Conference held at White Sulphur Springs, West Virginia, February 9-12, 1969, and appear in the 1969 Transactions.*

THE STUDY AREA AND METHODS

The area of northeast Minnesota that includes the Superior National Forest is characterized for the most part by a low concentration of people and limited commercial development. The primary attraction of the area is its extensive water resource in a wild land forest setting. Another major attraction is the Boundary Waters Canoe Area (BWCA). This is the Nation's only water-oriented Wilderness Area, and it occupies about 1 million of the Forest's 3 million acres. Most auto campers questioned in this study did not enter the BWCA, but many were well aware of its presence and recreational appeal.

Thirty-one auto campgrounds distributed throughout the Forest were included in the study. These campgrounds were characterized by a low level of modern development and general remoteness from the major travel routes of the area. Twelve campgrounds had no source of drinking water except lake or stream, only one had flush toilets, and only three were located adjacent to a paved road.

The importance of wildlife to forest visitors is probably related to the opportunities to see or hear wildlife in the area. Bird and mammal check lists for Minnesota show 292 different species of birds and 80 species of mammals present in the State (Buckmann 1968, Anon. 1968), many of which inhabit northeast Minnesota (fig. 1). Also, the Superior National Forest provides an opportunity to see or hear moose (*Alces alces*), timber wolves (*Canis lupus*), and common loons (*Gavia immer*); these wildlife species are more common here than in other parts of the Midwest, South, and East. Thus, ample opportunities exist in the study area to see and enjoy wildlife in its natural environment if the visitor so desires.

During the peak of the 1968 camping season (the latter part of July and August), 248 auto campers were interviewed.

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FIGURE 1. — Visitors in auto campgrounds adjacent to lakes and streams may see a bald eagle, the national bird, looking for a fish dinner near the water or perched in his nest of sticks high in a pine tree.

RESULTS

Who Were the Visitors?

Sixty-six percent of the auto campers came from Minnesota, and 15 percent from Illinois; 85 percent of all campers were on extended vacations. The average length of stay for vacationers was 7.2 days. This suggests that in terms of time spent in the forest environment, most people had ample opportunity to be exposed to the wildlife of the area. Most campers also had some previous experience in northeast Minnesota. Eighty-nine percent of the parties had been in the area before, and 65 percent had previously camped in the Superior National Forest.

Why Did Visitors Select Northeast Minnesota?

Campers were asked, "Why did you select northeast Minnesota and the Superior National Forest in particular for your camping trip?" The question was left unstructured in an effort to explore the range of choices. Campers were encouraged to state freely those factors that immediately came to mind. Thus, the array of responses given represented a crude index of the features that made the area most attractive to its visitors.

Replies included 49 different reasons for visiting the area, and specific reasons were not mutually exclusive. An average of three reasons was given per party.

Fishing appeared to be the major attraction of the area, with wilderness second (table 1). However, it is apparent that numerous aspects of the natural environment combine to form a specific sought-for atmosphere. While many people mentioned specific activities as the reason for choosing the area, they apparently desired to do these things in a specific kind of environmental setting. This suggestion is substantiated by the fact that 63 percent of those noting fishing as an attraction also mentioned at least one of the following three things as important in pulling them to northeast Minnesota: (1) wilderness, (2) quiet, peaceful, uncrowded, or (3) scenery. The attraction of this area, then, is not a single factor but a combination of factors. Recent studies have found this to be true in other parts of the United States and Canada (Gordon Lusty Survey Research Ltd. 1968, Hendee 1967, Taylor and Edwards 1960).

Table 1. — Responses to "Why did you select northeast Minnesota and the Superior National Forest, in particular, for your (1968) camping trip?"

Reasons	Respondents1/ (Total - 248)	
	Number	Percent
Fishing	154	62
Wilderness	103	42
Quiet, peaceful, uncrowded area	54	22
Scenery	53	21
Water-based activities (excluding fishing)	37	15
Getting away from city, routine, etc.	37	15
Camping in a National Forest	35	14
Lake Superior	27	11
Relatively close to home	25	10
Land-based activities (berry picking, hiking, driving, rock hounding)	24	10
Presence of many lakes and streams	24	10
New part of U.S.A. to visit	23	9
Visit friends in area	23	9
WILDLIFE	19	8
Other aspects of natural environment:		
Weather	19	8
Vegetation	12	5
Topography	6	2
Other activities:		
Visiting BWCA	17	7
Visiting Canada	10	4
Visiting iron mines	2	1
All other	4	2

1/ Many respondents gave more than one reason.

Perhaps surprising to many is the fact that wildlife apparently was not a prime factor in bringing auto campers to the area. Only 8 percent (19 parties) cited this aspect of the forest environment as an attraction. Thirteen of these 19 parties stated that wildlife in general prompted their visit. Others specifically listed bears (*Ursus americanus*) (2 parties), loons (2), wolves (1), and moose (1) as species they hoped to see (figs. 2, 3).

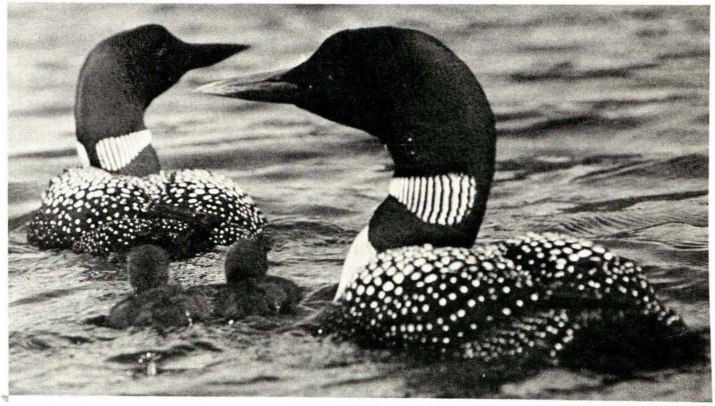

FIGURE 2. — Minnesota's state bird, the loon, is a common summer resident in lakes of northern Minnesota. Its piercing, yodel-like cry is a sound of the north country to which many parents like to call their children's attention. (Photo courtesy of the *Naturalist*)

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FIGURE 3. — The largest of all Minnesota mammals, the moose, is at home in the conifer and muskeg country of northern Minnesota.

Parties that mentioned wildlife as a reason for visiting northeast Minnesota also were motivated by the atmosphere of the area (table 2). Fifteen of the 19 parties (79 percent) that listed wildlife also noted one of the following three categories: (1) wilderness, (2) quiet, peaceful, uncrowded, or (3) scenery. Again, it is apparent that the lure of the area cannot be attributed to any one factor — wildlife represents only one of the many forest resources that make up this general atmosphere.

What Esthetic Effect Did Wildlife Have on the Visitor?

As a supplementary benefit to campers, the wildlife resource can hardly be challenged. Ninety percent (223 parties) of those questioned had seen wildlife of some type. Of these, 96 percent (215) said that the opportunity to observe birds and mammals in their natural setting had added to their outdoor experience (fig. 4). Only two parties felt that wildlife had detracted from their visit, and this was due to unpleasant contact with bears in the campground during the night. The remaining six parties that had seen wildlife felt that seeing these creatures had neither added to nor detracted from their visit.

Table 2. — Responses to "Why did you select northeast Minnesota and the Superior National Forest, in particular, for your (1968) camping trip?"

Reasons	Respondents who noted wildlife as an attraction1/ (Total - 19)	
	Number	Percent
Fishing	10	53
Wilderness	7	37
Quiet, peaceful, uncrowded area	7	37
Scenery	5	26
Water-based activities (excluding fishing)	3	16
Getting away from city, routine, etc.	2	11
Camping in a National Forest	1	5
Lake Superior	1	5
Presence of many lakes and streams	2	11
Relatively close to home	1	5
Land-based activities (berry picking, hiking, driving, rock hounding)	2	11
New part of U.S.A. to visit	2	11
Visit friends in area	0	0
Other aspects of natural environment:		
Vegetation	4	21
Topography	1	5
Weather	0	0
Other activities:		
Visiting BWCA	1	5
Visiting Canada	1	5
Visiting iron mines	0	0
All other	1	5

1/ Many respondents gave more than one reason.

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and enjoyment. It has also been developed to provide
informative and educational facts about the area you are visiting.
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FIGURE 4. — Self-guiding nature trails are becoming increasingly popular with visitors who desire to learn more about the forest environment.

What tangible benefits were afforded those 215 parties who felt that seeing wildlife added to their outing? Many parties (90) had difficulty in stating a definite benefit, but said that they "just enjoy watching them," for instance; others however, were explicit (table 3). Responses such as "adds to the feeling of wilderness," and "being close to nature," indicate that wildlife did have a pronounced effect on the forest experience of a number of campers. It also suggests that wildlife is, in part, associated with people's perception of that hard-to-define word *wilderness*.

Table 3. — *Responses to "Why did seeing wildlife ADD to your (1968) camping trip in the Superior National Forest?"*

Reasons	Respondents	
	Number	Percent
Just enjoy watching them	90	42
Educational for the youngsters	47	22
Adds to the "feeling of wilderness" or "being close to nature"	45	21
Enjoy watching them and don't see them often in their natural setting	17	8
Adds excitement, especially bears in the campgrounds	11	5
All other	5	2
Total	215	100

Particularly interesting and encouraging is the implication for the education of children (table 3). This parental concern and awareness should strengthen the plea to update public education by establishing conservation as an integral part of the school curriculum. Moreover, numerous persons, adults and children alike, expressed ignorance of the creatures around them, birds especially, and voiced a desire to learn more about this aspect of the forest environment.

This lack of awareness of wildlife is exemplified by the fact that surprisingly few species of birds and mammals were actually seen by campers. The number of different mammals seen per party ranged from 0 to 8 and averaged 3. Chipmunks (*Tamias striatus*), red squirrels (*Tamiasciurus hudsonicus*), black bears, and white-tailed deer (*Odocoileus virginianus*) were the most frequently observed species (fig. 5). The number of different birds seen per party ranged from 0 to 12 and averaged 2. It is noteworthy that few species of songbirds were actually identified. Many campers simply referred to them as "'just little birds." Part of this apparent "ignorance" might be attributed to the fact that few of the campers were bona fide wildlife observers — that is, none belonged to a birdwatching organization and only 10 parties (4 percent) actually considered themselves birdwatchers per se.

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FIGURE 5. — A friendly red squirrel is a frequent unexpected dinner guest.

DISCUSSION

The results of the study suggest that a higher level of education regarding wildlife would substantially increase the esthetic importance of the wildlife resource to the recreationist. Growth of conservation in the public school curriculum is only one avenue for increasing public contact with wildlife. Land managers could provide brochures characterizing the wildlife species of their specific locale. Such brochures could list the distinguishing characteristics of various species, describe the habitat in which they are most likely to be found, indicate the best time of day for successful observation, provide safety tips for observing or avoiding potentially dangerous species (fig. 6), and describe the techniques being used to preserve and sustain the wildlife resource.

Some individuals may wonder if organized interpretative programs are indeed the responsibility of the land manager. We believe that they are. An informed citizenry should be better able to understand the challenges facing land managers in their attempt to provide for the diverse and fast-growing desires of the recreating public. Also, an informed public should be more willing to cooperate in protecting the resource itself, and to take an active part in conservation activities.

FIGURE 6. — Bears are often seen around auto campgrounds in the Superior National Forest. While not naturally aggressive, bears can be dangerous when looking for food or protecting their young, and should be avoided at all times. (Photo courtesy of the *Naturalist*)

The results of this study indicate a need for continued research into other aspects of the wildlife resource as it relates to the total experience of visitors. If land managers are to make sound decisions as to how much, what types, and where outdoor recreation is to be provided, many pertinent questions will have to be answered. For instance, what proportion of forest visitors are attracted specifically by the esthetic values associated with observing wildlife? What segments of the population do these people represent? How aware are they of the different wildlife species around them? Which species enhance their visit most? Do their attitudes regarding the importance of wildlife to their outdoor experience change over time? What techniques or aids can resource managers provide the public that will further enhance visits to the out-of-doors?

SUMMARY

The results are preliminary and represent but one isolated example of the behavior of the recreating public. Although wildlife was of esthetic benefit to many of the auto campers in the survey, it was not a prime motivational factor in attracting them to the forest environment of northeast Minnesota. Most visitors were seeking a remote or wilderness-like area for summer recreation that afforded a maximum contrast to their urbanized living. They were attracted by the natural atmosphere of the area in general, and wildlife represented only one small component of that general atmosphere.

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